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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/620,784	07/21/00	BARNARD K	41193/21440

EXAMINER	
GIBSON, E	
ART UNIT	**PAPER NUMBER**
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021888
THOMPSON COBURN, LLP
ONE FIRSTAR PLAZA
SUITE 3500
ST LOUIS MO 63101

PM82/1011

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)	
	09/620,784	BARNARD, KENT DEON	
	Examiner	Art Unit	
	Eric M Gibson	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 March 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,6-15,18-25,28-76 and 78-109* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,6-15,18-25,28,31-44,46-70,72-76,78-82,87,90-94,97-102 and 105-109* is/are rejected.

7)☒ Claim(s) *29-30, 45,71,83-86,88-89, 95-96,103 and 104* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Drawings

This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

Claims 29-30, 88-89 and 95-96 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The parent from which these claims depend were canceled by amendment, thus the scope of the claim cannot be determined.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 6-12, 81-82, 87 and 91-94 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "each feature in the set" in line7-8. There is insufficient antecedent basis for this limitation in the claim. There is no recitation of "a feature" or multiple "features" in the set of information. Thus, it is unclear what exactly the applicant is claiming when referring to "each feature in the set".

Claims 2-3, 6-12 and 91-94 are necessarily rejected as being dependent upon a rejected base claim.

Claim 81 recites the limitation "said device" in line 6. There is insufficient antecedent basis for this limitation in the claim. There are multiple "devices" in the claim and it is not clear to which device the limitation "said device" is referring.

Claim 82 is necessarily rejected as being dependent upon a rejected base claim.

Claim 87 recites the limitation "each feature in the set" in line7-8. There is insufficient antecedent basis for this limitation in the claim. There is no recitation of "a feature" or multiple "features" in the set of information. Thus, it is unclear what exactly the applicant is claiming when referring to "each feature in the set".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Note: Claims 29-30, 88-89 and 95-96 are unsearchable because they depend from claims that have been cancelled.

Claims 1-3, 6, 8-11, 13-15, 18, 20-23, 25, 28, 31-44, 46-47, 52-69, 72-76, 80-81, 87, 90-93, 97-102, and 105-109 are rejected under 35 U.S.C. 102(b) as being anticipated by Lobb et al. (US005810680A).

As per claim 1, Lobb teaches inputting a first set of information to a first information processing and viewing device (220, figure 4), transmitting the information to the network (column 8, lines 1-11) and providing a second information processing and viewing device access to the information (140, figure 2A).

As per claim 2, Lobb teaches the Internet (column 11, lines 31-33).

As per claim 3, the apparatus M (140) is a portable hand-held computer.

As per claim 6, Lobb teaches altering the set of information with the second device, transmitting the information to the network and providing access to the second set of information (column 11, lines 22-52).

As per claim 8, Lobb teaches including GPS data (column 3, lines 11-13).

As per claim 9, Lobb teaches utilizing differential GPS data to increase the location accuracy (column 5, lines 49-57).

As per claim 10, Lobb teaches storing a national database at a remote computer (164, figure 2A) providing access using a modem over the internet (column 11, lines 31-33).

As per claim 11, the information in the national database is alterable (column 11, lines 45-52).

As per claim 91, Lobb teaches including GPS data (column 3, lines 11-13).

As per claim 92, Lobb teaches utilizing differential GPS data to increase the location accuracy (column 5, lines 49-57).

As per claim 13, Lobb teaches a first information processing and viewing device (220, figure 4), a central information processing site and database (164) and a second information processing and viewing device M accessing the information (140, figure 2A).

As per claim 14, Lobb teaches the Internet (column 11, lines 31-33).

As per claim 15, the apparatus M (140) is a portable hand-held computer.

As per claim 18, Lobb teaches altering the set of information with the second device, transmitting the information to the network and providing access to the second set of information (column 11, lines 22-52).

As per claim 20, Lobb teaches including GPS data (column 3, lines 11-13).

As per claim 21, Lobb teaches utilizing differential GPS data to increase the location accuracy (column 5, lines 49-57).

As per claim 22, Lobb teaches that the national database contains a plurality of golf courses (column 8, lines 54-67).

As per claim 23, the information in the national database is alterable (column 11, lines 45-52).

As per claim 25, Lobb teaches a portable information processing and viewing device (M, figure 2) having an information processor (CPU 100), a viewer (130), data inputs (keypad 110), and direct electrical connections for connection with a cooperative

device (see figure 2) wherein the information is related to a topographic characteristic of a golf course displayed on the viewer by visual indicators (column 6, lines 51-58).

As per claim 28, Lobb teaches that the cooperative device is a GPS receiver (108, figure 2).

As per claim 31, Lobb teaches that the cooperative device is a GPS receiver (108, figure 2) that modifies the first data set (column 10, lines 32-35).

As per claim 32, the geographic region in Lobb is a golf course (figure 1).

As per claim 33, Lobb teaches a second information processing device (150, figure 2A) that uploads the data entered into the portable device (column 10, lines 10-14).

As per claim 34, Lobb teaches a data link (118, 116, 114, 112 in figure 2).

As per claim 35, Lobb teaches a data link between the hand-held unit and a personal computer (figure 2A).

As per claim 36, Lobb teaches connection to a network (column 8, lines 14-26).

As per claim 37, the network in Lobb is a national database.

As per claim 38, Lobb teaches using the Internet to access the database (column 11, lines 31-33).

As per claim 39, Lobb teaches retrieving the geographical information related to the course from the national database (column 8, lines 54-67).

As per claim 40, the network provides the topographic characteristics of the course from the database (column 8, lines 54-67).

As per claim 41, see column 10, lines 18-20

As per claim 42, the geographic region in Lobb is a golf course (figure 1).

As per claim 43, see column 6, lines 51-58.

As per claim 44, Lobb teaches information related to a degree of accuracy of the position (column 10, lines 38-41).

As per claim 46, see column 10, lines 38-41, wherein Lobb teaches the position related aspect is modifiable.

As per claim 47, in column 10, lines 38-41 Lobb teaches that the position is modifiable so as to increase the accuracy of the location.

As per claim 52, the geographic region in Lobb is a golf course (figure 1) and the information included is related to playing of the golf course (column 6, lines 51-58).

As per claims 53-54, Lobb teaches including golfer data in the information (column 9, lines 6-9), including information related to playing a complete round of golf (i.e. golfer handicap).

As per claim 55, Lobb teaches statistically analyzing the data (column 11, lines 40-48).

As per claim 56, Lobb teaches that the display shows a club recommendation based on the past statistics (column 9, lines 50-53).

As per claim 57, Lobb teaches saving the player information for each golfer (column 11, lines 53-54).

As per claim 58, Lobb teaches statistically analyzing the data (column 11, lines 40-48).

As per claim 59, Lobb teaches that the display shows a club recommendation based on the past statistics (column 9, lines 50-53).

As per claim 60, Lobb teaches a portable information processing and viewing device (M, figure 2) having an information processor (CPU 100), a viewer (130), data inputs (keypad 110), and direct electrical connections for connection with a cooperative device (see figure 2) wherein the information is related to a topographic characteristic of a golf course displayed on the viewer by visual indicators (column 6, lines 51-58).

As per claim 61, Lobb teaches that the cooperative device is a GPS receiver (108, figure 2).

As per claim 62, Lobb teaches a representation of an attribute (column 6, lines 51-58).

As per claim 63, Lobb teaches indicating a position (column 6, lines 56-58).

As per claim 64, Lobb teaches displaying the distance from the ball to the hole (column 9, lines 50-51).

As per claim 65, the device in Lobb bases club recommendation on the golfer's past statistics (column 9, line 53).

As per claim 66, Lobb teaches utilizing differential GPS data to increase the location accuracy (column 5, lines 49-57).

As per claim 67, Lobb teaches a data link (118, 116, 114, 112 in figure 2).

As per claim 68, Lobb teaches connection to a network (column 8, lines 14-26).

As per claim 69, Lobb teaches updating the player's statistics from the portable device to the database (column 11, lines 41-52).

As per claim 72, Lobb teaches a portable information processing and viewing device (M, figure 2) having an information processor (CPU 100), a viewer (130), data inputs (keypad 110), and direct electrical connections for connection with a cooperative device (see figure 2) wherein the information is related to a topographic characteristic of a golf course displayed on the viewer by visual indicators (column 6, lines 51-58). Further including a representation of an attribute (column 6, lines 51-58), indicating a position (column 6, lines 56-58), utilizing differential GPS data (column 5, lines 49-57) and a second information processing device (150, figure 2A) that uploads the data entered into the portable device (column 10, lines 10-14).

As per claim 73, Lobb teaches a portable information processing and viewing device (M, figure 2) having an information processor (CPU 100), a viewer (130), data inputs (keypad 110), and direct electrical connections for connection with a cooperative device (see figure 2) wherein the information is related to a topographic characteristic of a golf course displayed on the viewer by visual indicators (column 6, lines 51-58). Further including a representation of an attribute (column 6, lines 51-58), indicating a position (column 6, lines 56-58), and a GPS receiver (108, figure 2).

As per claim 74, see Lobb column 5, lines 15-28.

As per claim 75, Lobb teaches utilizing differential GPS data to increase the location accuracy (column 5, lines 49-57).

As per claim 76, see Lobb column 5, lines 15-28 and 49-57.

As per claim 80, see Lobb column 5, lines 15-28 and 49-57 and column 10, lines 32-35, which teach determining the attitudinal coordinates (i.e. height).

As per claim 108, Lobb teaches receiving user inputs to change the location (column 10, lines 38-41).

As per claim 109, Lobb teaches inputting information to the device using a stylus (column 7, lines 15-17).

As per claim 81, Lobb teaches a GPS receiver (108, figure 2) and utilizing differential GPS data to increase the location accuracy (column 5, lines 49-57).

As per claim 107, Lobb teaches an antenna (106).

As per claim 87, Lobb teaches inputting a first set of information to a first information processing and viewing device (220, figure 4) wherein the information is related to a topographic characteristic of a golf course, inputting a second set of information (column 9, lines 6-9), transmitting the information to the network (column 8, lines 1-11) and providing a second information processing and viewing device, M, access to the information (140, figure 2A).

As per claim 90, Lobb teaches inputting a first set of information to a first information processing and viewing device (220, figure 4) wherein the information is related to a topographic characteristic of a golf course, inputting a second set of information (column 9, lines 6-9), transmitting the information to the network (column 8, lines 1-11) and providing a second information processing and viewing device, M, access to the information (140, figure 2A).

As per claim 97, Lobb teaches inputting a first set of information to a first information processing and viewing device (220, figure 4) wherein the information is related to a topographic characteristic of a golf course, inputting a second set of

information (column 9, lines 6-9), a central information processing site and database (164), and providing a second information processing and viewing device, M, access to the information (140, figure 2A).

As per claim 98, Lobb teaches including GPS data (column 3, lines 11-13).

As per claim 99, Lobb teaches utilizing differential GPS data to increase the location accuracy (column 5, lines 49-57).

As per claim 100, Lobb teaches a first information processing and viewing device (220, figure 4) wherein the information is related to a topographic characteristic of a golf course, inputting a second set of information (column 9, lines 6-9), a central information processing site and database (164), and providing a second information processing and viewing device, M, access to the information (140, figure 2A).

As per claim 101, Lobb teaches including GPS data (column 3, lines 11-13).

As per claim 102, Lobb teaches utilizing differential GPS data to increase the location accuracy (column 5, lines 49-57).

As per claim 105, Lobb teaches displaying the ball position utilizing GPS data (column 10, lines 30-38).

As per claim 106, teaches utilizing differential GPS data to increase the location accuracy (column 5, lines 49-57).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 13 and 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobb in view of Mauney et al. (US005214757A).

Lobb teaches the invention as explained in the rejection of claims 6, 18, 25 and 46. Lobb does not teach updating the geographical database with current information. Mauney teaches an automated mapping system that updates a geographical database with current information (column 3, lines 59-64). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to update the geographical database in Lobb using the method taught by Mauney, in order to have an accurate representation of the course available to the user.

Claims 12, 24 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobb in view of Born et al. (US005949679A).

Lobb teaches the invention as explained in the rejection of claims 10, 22 and 25. Lobb further teaches that the database is accessible over the internet and for client viewing, but does not specifically teach a web site. Born teaches a golf scoring computer system wherein the data is transmitted to a database and is accessible by clients to view using a web browser. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to provide a web site access to the database in the invention of Lobb, as taught by Born, so that the client could access the data.

Claims 78-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobb in view of Dudley (US005772534A).

Lobb teaches the invention as explained in the rejection of claim 73. In the invention of Lobb, the GPS and dGPS signals are received by the portable unit rather than received at a master location and transmitted to the portable unit through a data link. Dudley teaches a satellite enhanced golf information system wherein the portable unit receives position updates from GPS and dGPS either on-board or through a data link with a master location (column 3, lines 40-54). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to alternatively transmit the GPS and dGPS data over the data link between the portable unit and the master location, as shown by Dudley, in order to provide for a portable device that does not need as much specialized equipment.

Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lobb in view of Barber (US005245537A).

Lobb teaches the invention as explained in the rejection of claim 60. Lobb does not teach that the information is displayed as a moving representation. Barber teaches a portable distance tracking device for golfing that includes a movement measuring device that continuously computes the users coordinates (column 2, lines 54-58). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to display a moving representation of the user in the system of Lobb, in order to continuously monitor the user's position, as taught by Barber.

Allowable Subject Matter

Claims 45, 71, 83-86, and 103-104 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As per claim 45, the prior art does not teach or suggest the device as claimed wherein the degree of determination accuracy of the position is indicated by a visual signifier.

As per claim 71, the prior art does not teach or suggest the device as claimed wherein the moving representation of the playing of the golf course is displayable in alterable manners, including the rate of progression of the representation.

As per claims 83-86, the prior art does not teach or suggest the device as claimed wherein a specific type of antenna is used.

As per claims 103-104, the prior art does not teach or suggest the system as claimed wherein the golf course topography includes processing and displaying difference of elevation information between any two points on the golf course as selected on the processing and viewing device.

Claims 82 and 93-94 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

As per claim 82, the prior art does not teach or suggest the device as claimed wherein the increase in the degree of accuracy of the stored set of information includes an increase in the degree of accuracy of a relative height of the location.

As per claims 93-94, the prior art does not teach or suggest the system as claimed wherein the golf course topography includes processing and displaying difference of elevation information between any two points on the golf course as selected on the processing and viewing device.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bianco et al. (US006263279B1) teaches a memory for GPS-based golf distancing systems. Cohodas et al. (US006171199B1) teaches a method and system of providing information on golf courses for players and for course design and modification. Karmel (US006111541A) teaches a positioning system using packet radio to provide differential global positioning satellite corrections and information relative to a position. Moriarty et al. (US006062991A) teaches communication, calculation, and record keeping method and apparatus for a golf course. Dean et al. (US006055512A) teaches networked personal customized information and facility services. Stashko (US006029121A) teaches a golf pin distance measuring system. Born et al. (US005949679A) teaches a golf scoring computer system. Prabhakaran (US005904727A) teaches graphical fleet management methods. Rudow et al. (US005878369A) teaches a golf course yardage and information system. Hyuga (US005797809A) teaches a golf course guidance method, guidance device, and management system. Wilens (US005779566A) teaches a handheld golf reporting and

statistical analysis apparatus and method. Bonito et al. (US005127044A) teaches an automatic golf scoring and scheduling system. Remedio et al. (US004910677A) teaches a golf score recording system and network. JP 10216294A teaches a portable golf score accumulation system for a golf course. Irvine (WO 96/40387A1) teaches a golf computer device and associated method. JP 08057105A teaches a golf data display. Smith et al. (GB2271063A) teaches a golfing apparatus. Osamu (GB2249202A) teaches a golfing data recorder.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M Gibson whose telephone number is (703) 306-4545. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (703) 308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

MICHAEL J. ZANELLI
PRIMARY EXAMINER

EMG
October 1, 2001